

**Historical Background**  
**The Ship's Medicine Chest and Medical Aid at Sea**

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## HISTORICAL BACKGROUND

This edition of The Ship's Medicine Chest and Medical Aid at Sea continues a tradition that extends back for more than a century. The first edition of this book was published by the Marine Hospital Service, forerunner of the United States Public Health Service, in 1881.

The Marine Hospital Service was established by the Federal Government in 1798 to provide medical care to sick and disabled American merchant seamen. The first permanent Marine hospital was authorized on May 3, 1802 to be built in Boston. The Service was just a loosely knit group of hospitals for merchant seamen until 1870 when it was reorganized and the administration of the hospitals centralized in Washington, D.C. A Supervising Surgeon, Dr. John Maynard Woodworth, was appointed to head the Service in 1871. His title was changed to Supervising Surgeon General (later Surgeon General) in 1875. Under Woodworth, the Marine Hospital Service began its transformation into the disciplined and broad-based Public Health Service (the name it received in 1912) of the future. Dr. Woodworth adopted a military model and put his physician "officers" in uniform. In 1889, the Service's Commissioned Corps was formally established by law.

Even before the establishment of the Marine Hospital Service, Federal legislation had been enacted in 1790 which required every American flag vessel over 150 tons with a crew of ten or more to carry a medicine chest. Since merchant ships typically did not carry a physician, there was obviously a need to provide some kind of basic medical instruction for the seamen that went beyond the simple directions that frequently accompanied medicine chests. Although there was no Government-issued manual for this purpose for almost a century after the passage of the 1790 law, merchant seamen could consult works published by private physicians, such as Joseph Bonds' The Master-Mariners Guide in the Management of His Ship's Company, with Respect to Their Health, being Designed to Accompany a Ship's Medicine Chest (Boston, 1847). Bond explained his reasons for preparing his book as follows:

"My apology for the undertaking is, that in the medicine-chests for the use of the vessels belonging to our posts, I have never seen books of directions that are suitable. This little work is to supply the deficiency which must have been felt by every shipmaster, having no other guide in the management of disease than the small book of directions usually accompanying medicine chests."

In 1881, the Marine Hospital Service decided to issue its own medical manual, the ancestor of the present volume, under the title, Handbook for the Ship's Medicine Chest (Washington, D.C., 1881). In his preface to the book, Supervising Surgeon General John B. Hamilton explained the purpose of the handbook as follows:

"This book is issued only to vessels subject to the payment of hospital dues, and is intended to be one to which the master or other officer in charge of a vessel may refer

for information upon the occasion of an injury to any of the crew or the appearance of sickness among them, to aid in obtaining a knowledge of the act of preventing disease, to give the necessary information as to the means of obtaining hospital or dispensary relief, and to serve as a guide to the proper use of the medicine chest required by law to be kept on board.”

The book was divided into several sections. It began with a brief discussion of disease prevention, followed by a list of all of the medicines and supplies that should be in the ship’s medicine chest. The longest portion of the book was a discussion of various accidents and illnesses and how to treat them. Also included in the work was information on the ports where Marine Hospital Service or contract physicians were available to treat seamen. Finally, an appendix provided information on the nature and purposes of the Marine Hospital Service and the laws related to it.

Examples of items to be carried in the medicine chest were adhesive plaster, bandages, castor oil, calomel, chloroform liniment, fluid extract of ginger, opium, quinine, saltpeter, salicylic acid, sodium bicarbonate, surgeon’s needles, and a tooth forceps. The ship’s master was admonished to inspect the medicine chest carefully before starting out to sea to be sure that it was furnished with all of the items on the list.

The many injuries and diseases discussed included fractures, dislocations, malarial fevers, dysentery, yellow fever, cholera, scurvy, syphilis, delirium tremors, and smallpox. Resuscitation after near drowning also received attention.

The case of yellow fever may be cited as an example of a treatment regimen for a disease. The caregiver was instructed to begin treatment with senna tea as a laxative. If the skin was very dry, the legs should be rubbed with mustard water. If the patient was vomiting, a nitre mixture (consisting of saltpeter, water, and an alcoholic solution of ethyl nitrite) would also be given. If the fever was not high, quinine was also administered.

The handbook goes on to discuss three cardinal rules to observe in treating yellow fever. First, insure that the patient gets sufficient rest by giving Dover’s powder (which contained opium) and inducing the patient to remain in bed. Second, insure free action of the skin by warm baths and sweating medicines. Third, strengthen the patient by means of weak whiskey and water, beef tea, quinine, and other stimulants. The patients would not be given any solid food until after convalescence.

The handbook proved to be so useful that a second edition, revised and expanded appeared in 1904. Containing 101 pages, the second edition was more than twice the size of the original 45-page publication. The work continued to be revised and new editions issued over the course of the twentieth century. In addition to the two editions previously noted, the National Library of Medicine holds editions published in 1929, 1947 (reprinted with additions and changes in 1955), 1978, and 1984.

By the 1929 edition, the book's title had changed to The Ship's Medicine Chest and First Aid at Sea. With the 1978 edition, the title was slightly altered to The Ship' Medicine Chest and Medical Aid at Sea, perhaps to emphasize the fact that medical care going beyond what we normally think of as first aid would often be required aboard ships. By the time that the 1984 edition was issued, legislation in 1981 had ended the entitlement of merchant seamen to the provision of health care by the Public Health Service and closed the PHS hospitals. Consistent with its origins as a health care system for merchant seamen, however, the PHS continues to produce the book. Although designed for use aboard merchant ships, the work has also found use over the years in other situations, such as on fishing vessels and in backwoods areas. For over 100 years it has filled a need for reliable medical information in cases where medical care by a health professional is not available.